

# Construction details for making a Toy

HE toy caravan illustrated on the other side, can be completed from the patterns provided, with the help of these instructions. To have the sheet for reference, it is advisable to trace off the patterns direct on to the wood of the thickness suggested, the cutting out is done with the fretsaw, and the construction is straightforward. The finished article should be painted in bright colours.

The patterns themselves show the outline of the part to be cut, and also dotted lines indicating where other parts These positions must be measured and marked out, and care taken to get a strong joint in every case, so the toy will stand up to the rough handling it is likely to receive.

### Main Body

The main body of the caravan is built first as a complete unit. Cut the floor, two sides and two ends. The half door opening shown on the pattern of the front and back, should be cut in the back only. Fit this back and front between the two sides, setting it inwards just over in., as shown by the dotted lines on the patterns concerned. This fourpiece frame is glued together firmly and The window opening is cut in both sides, and you can add transparent material for imitation glass behind. There are four pieces forming the ornamental shutters; they are glued one each side of the window where indicated on the pattern. The actual shutter itself is painted on according to the marks shown.

The roof is made from stout white card, but need not be added at present, because by its omission you will be able to paint the inside more easily.

## **Back Steps**

To the back of the caravan, the steps are added. They can be built as a separate unit (see Fig. 1), consisting of the two side shapes with the three treads between. Get them level and equidistant, and if you think fit, drive a small nail in through the outer side as shown. The steps fit into the back by the open tenon (B), and can be left movable or glued in position just as desired.

The back axle is a plain piece of wood glued beneath the floor at rightangles. it is set inwards 11ins, and the angle blocks cut to the shapes shown are glued in the rightangle provided, to stiffen the whole thing up, as seen at Fig. 2. Each end of these axles has a circular disc just over ½in. long glued to the end, projecting slightly below, as you can see at Fig. 2. Be sure to get these discs alike at each end to ensure the true running of pivot. A good plan is to add a blocking piece inside the van into which the screw will turn. If possible, too, add a thin metal washer between the turntable and the floor, to reduce friction.

The axle bar is next built in the same manner as the other. It is glued across the front axle support as two angle blocks on each side, and the disc for the wheel pin on each end (see Fig. 3). Two tiny screw hooks are added to the front edge to link up with the shafts which can next be made (see Fig. 4). The tailboard is glued to overlap slightly each side, and the screweyes added to coincide with the others in the turntable portion.

#### The Horse

The horse is cut to the outline shown. If you prefer to have one made thicker, you can glue two pieces of §in. wood together. There is still room for the in. board between the shafts. This thicker outline will give you the opportunity of carving and shaping the animal to make it more realistic. If you cut the two in this way, remember to get the right action for the legs, so that the two offside ones are cut on one board, and the two nearside ones are cut in the other. Note the position of the hole for the pivot pin which goes through the shafts both sides as well as the horse itself. A fairly stout pin with its ends turned over, will serve. Do not, howwhich the screw holding the wheels themselves can be driven. If you are using a double thickness of wood for the horse, the discs can be omitted. Here again, a thin washer between wheel and main body, will help in easy running. Have round-headed screws so that the parts can be taken off for painting.

The wheels of the caravan are simply circular discs cut with fancy spokes added on to the axle discs with screws, and if possible, washers between. The figure of the driver is cut to the outline shown, and after painting, is glued on the front of the caravan.

The rest of the work after cleaning, consists of painting. This should be done carefully to make a bright attractive finish. The markings of the horse can be painted on, the shutters, doors and windows can be indicated by lining if you follow the style shown on the picture of the finished article. There is no overlay to the sides, but the thick black lines would frame this up quite The shutter portion, too, is painted on in a contrasting colour from the caravan itself.

Paint the inside, add curtains to windows and doors, then glue on the roof. That part, too, should also be painted, possibly a dark brown or black.

The harness and trappings of the horse can be either painted, or better still,

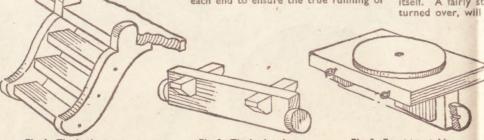


Fig. I-The back steps

Fig. 2-The back axle

Fig. 3-Front turntable

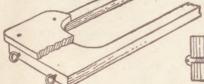


Fig. 4-Shafts and fixing eyes



Fig. 5-Section of

fillet pieces can be added inside in the

As the sides slope outwards the angle at the bottom must be cleaned down to be flat. You could do this by taking the whole glued frame and rubbing it with a circular movement on a piece of flat glasspaper. Stiffening pieces forming the roof ribs are also cut and let into the extension of the sides at the point (A).

the wheels.

For the forward wheels you will need movable portion such as shown in Fig. 3. The circular disc of turntable is glued to the front axle support. Now fit this piece underneath the floor with its centre point 12ins. from the front. Have a flat-headed screw countersunk into the wood, but long enough to drive well into the floor and so serve as a ever, fix the horse finally until all carving and painting has been under-

If you are cutting the horse from one thickness of §in. wood only, you should add the discs to the feet as shown by the sectional view at Fig. 5. These lin. thick discs extend slightly below the hoof, and are glued to the horse itself. provides a good thickness of wood into added in thin strips of American cloth or very thin leather for realism. The reins, of course, run from the bit to the hands of the driver. As the wood throughout may be absorbent, the best plan is to give a complete coat of matt light paint to fill up the grain, then add a second one of the colour desired.